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- (71) Applicant (for all designated States except US): **BEDE PLC** [GB/GB]; Belmont Business Park, Durham DH1 1TW (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **INNEMAN, Adolf** [CZ/CZ]; K Lesu 965, 142 00 Praha (CZ). **PINA, Ladislav** [CZ/CZ]; Nad Lesnim Divadlem 14, 14200 Praha (CZ). **BOWEN, David, Keith** [GB/GB]; 30 Oakwood Grove, Warwick CV34 5TD (GB). **MENZER, Stephan** [DE/GB]; 19 Regent Street, Horbury, Wakefield, West Yorkshire WF4 6EP (GB).

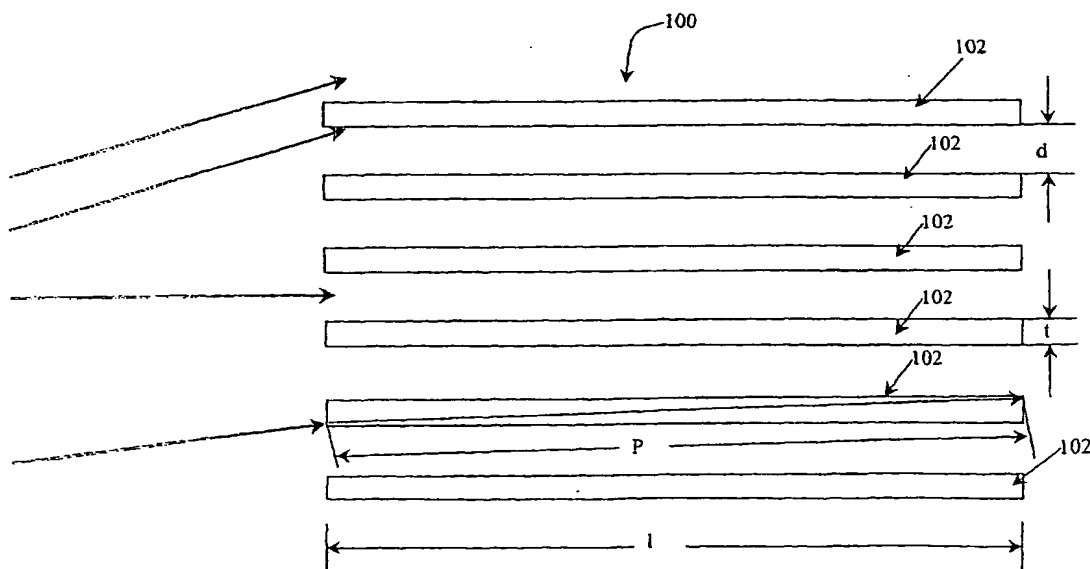
- (74) Agent: **MURGITROYD & COMPANY**; Scotland House, 165-169 Scotland Street, Glasgow G5 8PL (GB).
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(54) Title: **SOLLER SLIT USING LOW DENSITY MATERIALS**



(57) Abstract: A Soller slit device is provided for collimation of high energy radiation, such as X-ray or EUV radiation, and has a low angle of divergence (less than 0.1°) and a high transmission efficiency (60 to 80% or greater). The Soller slit is made up of multiple blades of low-density material, such as glass, mica, or the like, which are treated to reduce reflectivity. The Soller slit device of the invention advantageously provides an increased peak intensity and decreased peak width in diffraction patterns produced in high energy diffractometry applications, such as X-ray diffractometry.

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